## CLAIMS

1. Method of dewatering sludge, comprising

- addition of a basic agent to sludge having a pH equal to or less than 8,

- addition to the sludge of at least one flocculating organic component,

- by the addition of the above mentioned basic agent, an increase in pH of the sludge to a value less than a pH as from which degradation of the said at least one organic component takes place,
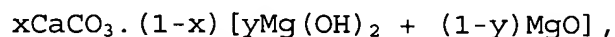
- flocculation of the sludge, and

- separation of the flocculated sludge between dewatered sludge and a liquid phase,

characterised in that the above mentioned basic agent is a calcaro-magnesian compound complying with the formula

$$xCaCO_3.(1-x)[yMg(OH)_2 + (1-y)MgO],$$

in which

x and y are molar fractions
$0.45 \leq x \leq 0.75$, and
$0 \leq y \leq 1$,

and in that the treated sludge has, until after the said separation, the said value lower than a pH as from which

degradation of the said at least one organic component takes place.

2. Method according to claim 1, characterised in that the calcaro-magnesian compound is a half-burnt dolomite, comprising an MgO component, possibly partially or totally in the form of $Mg(OH)_2$.

3. Method according to one or other of claims 1 and 2, characterised in that it comprises the said increase in pH to a value of no more than 10.

4. Method according to one of claims 1 to 3, characterised in that the addition of the calcaro-magnesian compound takes place prior to, simultaneously with and/or after the addition of the said at least one flocculating organic compound.

5. Method according to claim 4, characterised in that the addition of the calcaro-magnesian compound takes place before the above mentioned separation step.

6. Method according to any one of claims 1 to 5, characterised in that it comprises, after the said separation, an incineration of the dewatered sludge.

7. Method according to any one of claims 1 to 6, characterised in that, in the case of acid sludge, it also comprises a prior neutralisation of this acid sludge so that it has a pH of at least 6.

8. Method according to any one of claims 2 to 7, characterised in that it the half-burnt dolomite issues from a burning of double calcium and magnesium carbonate under conditions such that it has a CaO content of less

than 5% by weight and an $MgCO_3$ content of less than 10% by weight.

9. Use of a calcaro-magnesian compound complying with the formula $xCaCO_3.(1-x)[yMg(OH)_2 + (1-y)MgO]$, in which x and y are molar fractions, $0.45 \leq x \leq 0.75$, and $0 \leq y \leq 1$, for the treatment and dewatering of sludge having a pH equal to or less than 8.

10. Dewatered sludge, comprising a calcaro-magnesian compound content complying with the formula $xCaCO_3.(1-x)[yMg(OH)_2 + (1-y)MgO]$, in which x and y are molar fractions, $0.45 \leq x \leq 0.75$, and $0 \leq y \leq 1$, and having a pH greater than 8 and equal to or less than 10.

11. Dewatered sludge according to claim 10, comprising at least 15% by weight of the calcaro-magnesian compound with respect to the dry matter of the sludge before dewatering.